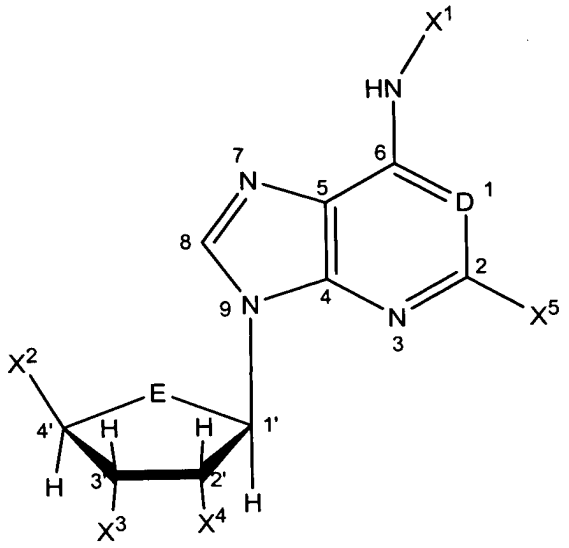
Amendments to the Claims:

1. (Currently amended) A product which is a compound of the formula:



wherein

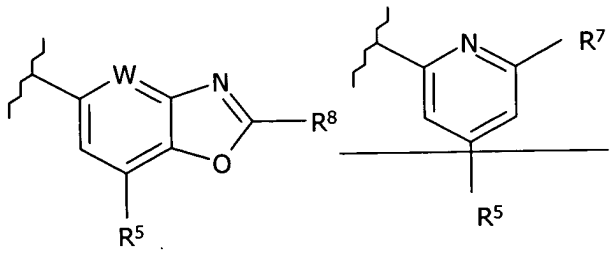
D is N or CH;

E is O, S or CH_2;

X^1 is a group of the formula $-CR^{20}R^{21}$-CYCLE, where

R^{20} and R^{21} are the same or different and H, F or CH_3;

CYCLE is of formula (II) ~~or formula (III)~~:



(II) (III)

where:

R^5 is iodine, bromine, methyl or trifluoromethyl;

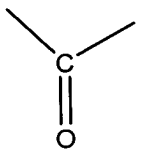
~~R^7 is H, halogen, C_1-C_{10} acyl, OR^{11}, CO_2R^{11} or $CONR^{11}$ where R^{11} is C_1-C_{10} hydrocarbyl optionally containing one or more in-chain and/or in-ring -O- linkages;~~

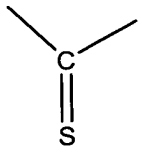
R^8 is $-NR^9R^{10}$ or $-COR^9$, where R^9 and R^{10} are each independently methyl or ethyl; and

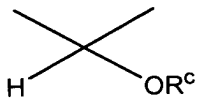
W is N or CH;

[[.]]X^2 is hydroxymethyl, (C_1-C_3)alkoxymethyl, (C_3-C_5)cycloalkoxy methyl, carboxy, (C_1-C_3)alkoxycarbonyl, (C_3-C_5)cycloalkoxy-carbonyl, 1,1-aminoiminomethyl, 1,1-(mono-N- or di-N,N-(C_1-C_4)alkylamino)iminomethyl, 1,1-(mono-N- or di-N,N-(C_3-C_5)cycloalkylamino)iminomethyl, carbamoyl, mono-N- or di-N,N-(C_1-C_4)alkylaminocarbonyl, mono-N- or di-N,N-(C_3-C_5)cycloalkyl-aminocarbonyl or N-(C_1-C_4)alkyl-N-(C_3-C_5)cycloalkylamino-carbonyl;

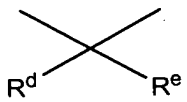
X^3 and X^4 are each independently hydrogen, alkyl, hydroxyalkyl, alkoxyalkyl, OR^a or NR^aR^b, where R^a and R^b are independently hydrogen, alkyl, aralkyl, carbamoyl, alkyl carbamoyl, dialkylcarbamoyl, acyl, alkoxycarbonyl, aralkoxycarbonyl, aryloxycarbonyl, or, when X^3 and X^4 are both OR^a, the two R^a groups together may form



,


,


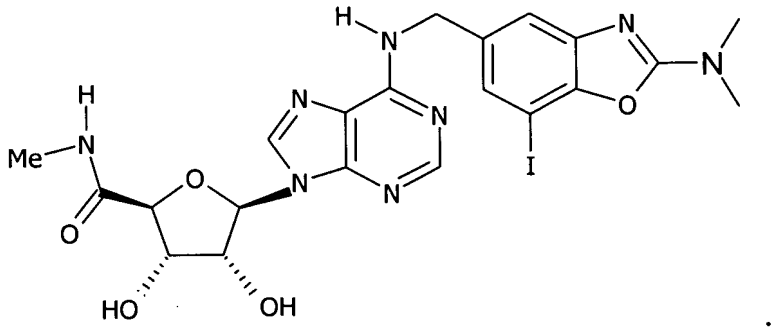
where R^c is hydrogen or alkyl,



where R^d and R^e are independently hydrogen, alkyl, or together with the carbon atom to which they are attached may form a 1,1-cycloalkyl group;

X^5 is H, halogen, (C_1-C_{10})alkyl, fluorinated (C_1-C_{10}) alkyl (e.g. trifluoromethyl), (C_1-C_{10}) alkoxyalkyl, (C_1-C_{10})alkoxy, (C_1-C_{10})alkylether, (C_1-C_{10})thioalkoxy, (C_1-C_{10})alkylthio, amino, (C_1-C_{10})alkylamino, -COX^6R^{25} where X^6 is O or NH and R^{25} is (C_1-C_4)alkyl optionally terminally substituted by an aryl or a heteroaryl group and additionally or alternatively terminally substituted by hydroxy, (C_2-C_{10})alkenyl, (C_2-C_{10})alkynyl, or is (C_2-C_{10})alkenyl, (C_2-C_{10})alkynyl in either case terminally substituted by an aryl or heteroaryl group and, when having a terminal methylic carbon atom, optionally further terminally substituted by hydroxy,

or a pharmaceutically acceptable salt or prodrug thereof or a pharmaceutically acceptable salt of such a prodrug[[.]], provided that the compound is not



.

2. (Original) A product of claim 1, wherein

D is N;

E is O;

X^2 is mono-N- or di-N,N(C_1-C_4)alkylaminocarbonyl, mono-N- or di-, N-(C_3-C_5)cycloalkylaminocarbonyl or N-(C_1-C_4)alkyl-N- (C_3-C_5)cycloalkylaminocarbonyl;

X^3 is OH or NH_2;

X^4 is OH;

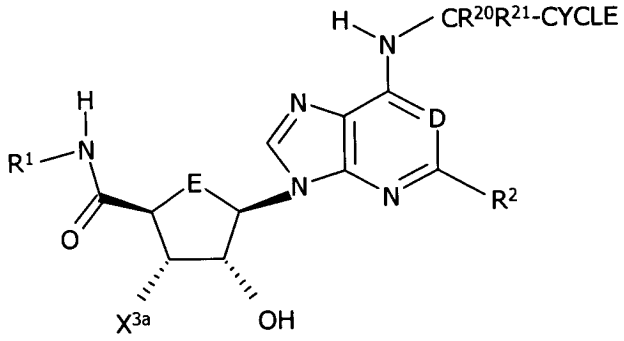
X^5 is H, halogen, (C_1-C_{10})alkyl, trifluoromethyl, (C_2-C_{10})alkenyl, (C_2-C_{10})alkynyl, or either of the latter two groups where terminally substituted as defined in claim 1.

3. (Currently amended) A product of claim 1 ~~or claim 2~~ wherein X^5 is halogen.

4. (Currently amended) A product of claim [[3]] 2 wherein X^5 is bromine or chlorine.

5. (Currently amended) A product of ~~any preceding~~ claim 1 wherein R^{20} and R^{21} are both H.

6. (Currently amended) A product of claim 1 wherein the compound is of formula (V):



(V)

where:

-$CR^{20}R^{21}$-CYCLE[[,]] and D ~~and R^2~~ are as defined in claim 1;

R^2 is H, halogen, (C_1-C_{10})alkyl, fluorinated (C_1-C_{10}) alkyl (e.g. trifluoromethyl), (C_1-C_{10}) alkoxyalkyl, (C_1-C_{10})alkoxy, (C_1-C_{10})alkylether, (C_1-C_{10})thioalkoxy, (C_1-C_{10})alkylthio, amino, (C_1-C_{10})alkylamino, -COX^6R^{25} where X^6 is O or NH and R^{25} is (C_1-C_4)alkyl optionally terminally substituted by an aryl or a heteroaryl group and additionally or alternatively terminally substituted by hydroxy, (C_2-C_{10})alkenyl, (C_2-C_{10})alkynyl, or is (C_2-C_{10})alkenyl, (C_2-C_{10})alkynyl in either case terminally

substituted by an aryl or heteroaryl group and, when having a terminal methylic carbon atom, optionally further terminally substituted by hydroxy;

E is O, S or CH_2 ~~(e.g. E is O and optionally D is N and R^2 is Cl or other halogen)~~;

R^1 is C_1-C_4 alkyl; and

X^{3a} is -OH or $-NH_2$.

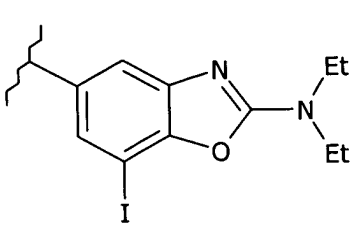
7. (Original) A product of claim 6 wherein E is O.

8. (Canceled)

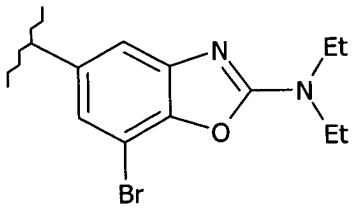
9. (Currently amended) A product of claim [[8]] 1 wherein W is N.

10. (Currently amended) A product of claim ~~8 or claim 9~~ 1 wherein R^8 is dimethylamino or diethylamino.

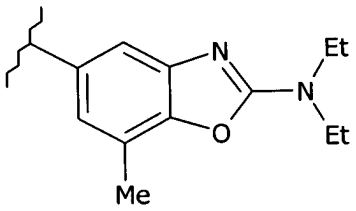
11. (Currently amended) A product of claim [[8]] 1 wherein CYCLE is selected from the group consisting of the following moieties:



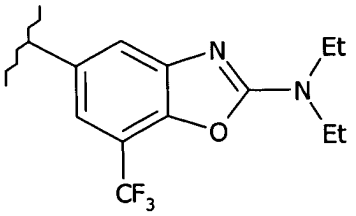
(1)



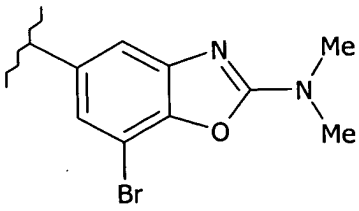
(2)



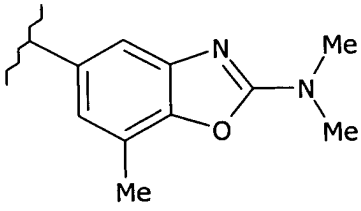
(3)



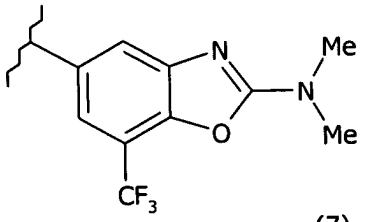
(4)

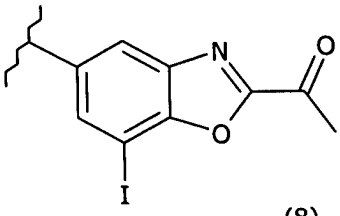


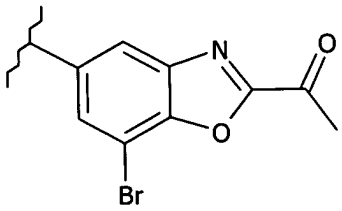
(5)

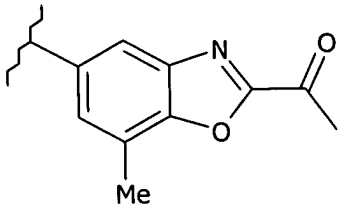


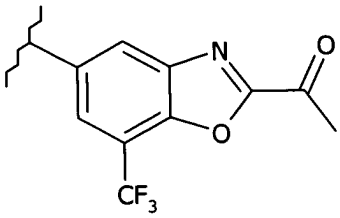
(6)

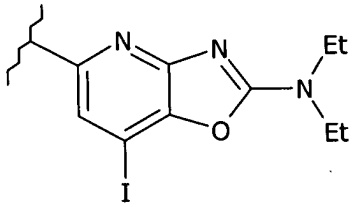

(7)

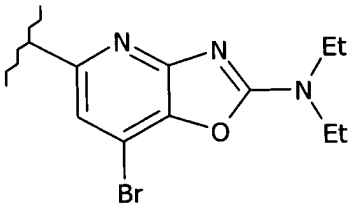

(8)

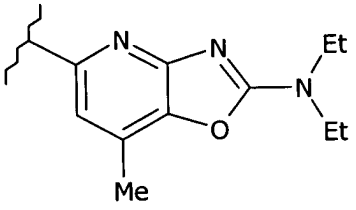

(9)

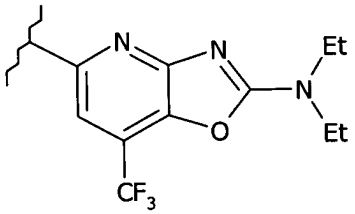

(10)

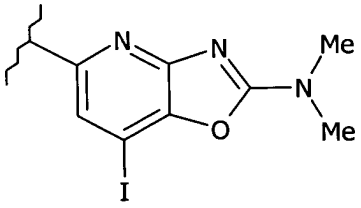

(11)

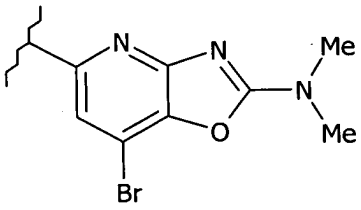

(12)

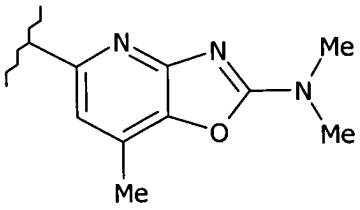

(13)

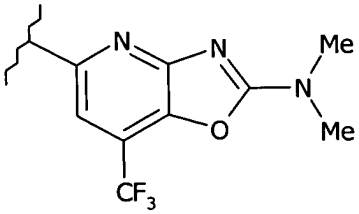

(14)

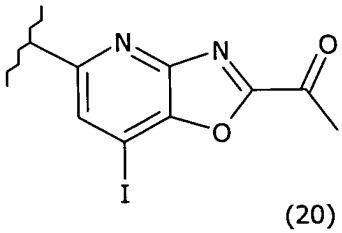

(15)

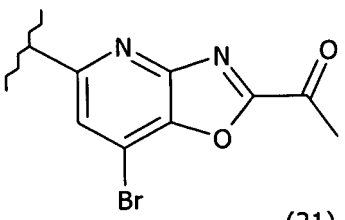

(16)


(17)

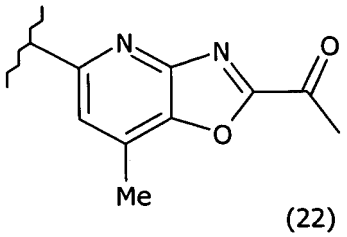

(18)


(19)


(20)

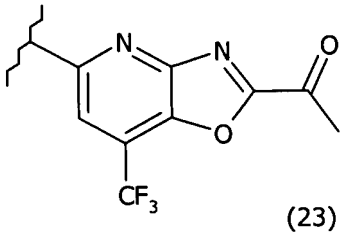


(21)



(22)

and

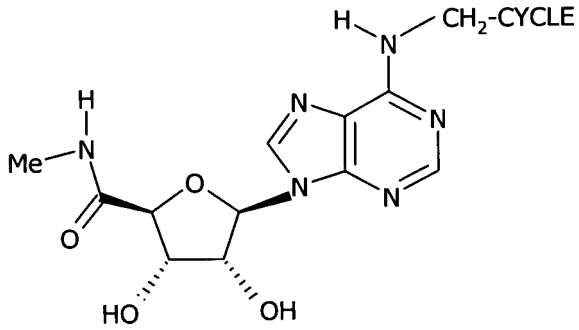


(23)

.

12. (Original) A product of claim 11 wherein CYCLE is of formula 1, 2, 3 or 4; or of formula 12, 13, 14 or 15.

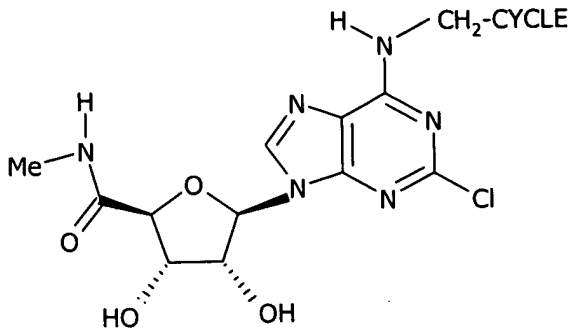
13. (Currently amended) A product of ~~any of claims 8, 11 and 12~~ claim 1 wherein the compound is of formula (VI):



(VI)

where CYCLE is a group of formula (II).

14. (Currently amended) A product of ~~any of claims 8, 11 and 12~~ claim 1 wherein the compound is of formula (VII):

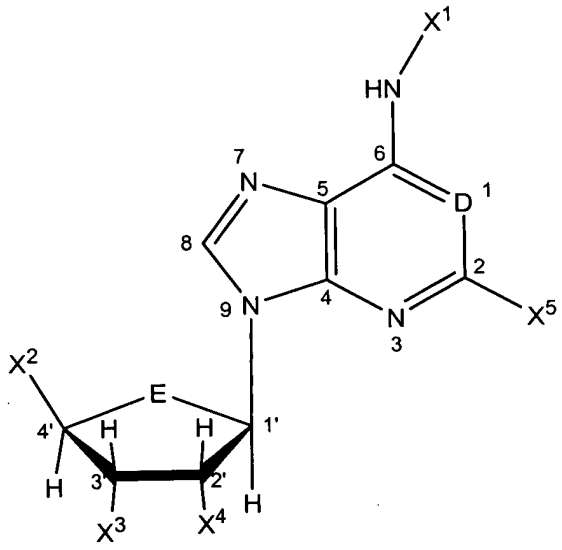


(VII)

where CYCLE is a group of formula (II).

15-19. (Canceled)

20. (Currently amended) A ~~compound~~ product which is a compound of formula (VIII):



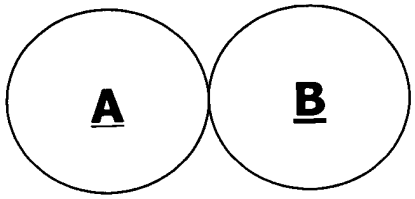
(VIII)

wherein

D is N or CH;

E is O, S or CH_2;

X^1 is of the formula $-CR^{20}R^{21}$-CYCLE where R^{20} and R^{21} are the same or different and H, F or CH_3; and CYCLE is a bicyclic (fused) heteroaromatic ring of the formula



wherein

ring A is a 5- or 6- membered ring characterised by the following features (in which ring positions are numbered relative to the linkage to $-CR^{20}R^{21}$-):

i. a carbon atom at the 1-position;

ii. carbon atom as CH or a nitrogen atom at position 2;

iii. it is 3, 4 fused to ring B;

iv. the 5-position ring atom is substituted by a moiety R^5 which is H, halogen, or an organic moiety having from 1 to 6 plurally valent atoms in addition to monovalent atoms selected from hydrogen and halogen;

v. if a 6-membered ring, it has at the 6-position a nitrogen, or –CM- where M is H, CH_3 or F;

ring B is a 5 or 6 membered ring characterised by the following features:

(a) an in-ring heteroatom including O, N or S joined to the 4-position of ring A;

(b) said in-ring heteroatom is joined within the ring secondly to a carbon which is substituted by a moiety R^8 which is $-N(C_2H_5)_2$;

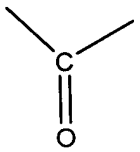
(c) an in-ring atom joined to the 3-position of ring A which is N,O, S or C, said C being in the form of a CH or CO group;

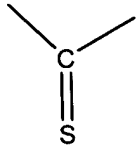
(d) in the case of a 6-membered ring, the remaining ring member is nitrogen or carbon in the form of CH;

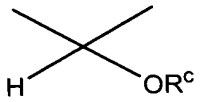
X^2 (the 4' substituent) is hydroxymethyl, (C_1-C_3)alkoxymethyl, (C_3-C_5)cycloalkoxy methyl, carboxy, (C_1-C_3)alkoxycarbonyl, (C_3-C_5)cycloalkoxycarbonyl, 1,1-aminoiminomethyl, 1,1-(mono-N- or di-N,N-(C_1-C_4)alkylamino)iminomethyl, 1,1-

(mono-N- or di-N,N-(C_3-C_5)cycloalkyl-amino)iminomethyl, carbamoyl, mono-N- or di-N,N-(C_1-C_4)alkylaminocarbonyl, mono-N- or di-N,N-(C_3-C_5)cycloalkylaminocarbonyl or N-(C_1-C_4)alkyl-N-(C_3-C_5)cycloalkylaminocarbonyl;

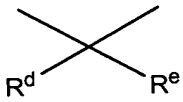
X^3 and X^4 are each independently hydrogen, alkyl, hydroxyalkyl, alkoxyalkyl, OR^a NR^aR^b, where R^a and R^b are independently hydrogen ~~(most preferably X^3 and X^4 are OH)~~, alkyl, aralkyl, carbamoyl, alkyl carbamoyl, dialkylcarbamoyl, acyl, alkoxycarbonyl, aralkoxycarbonyl, aryloxycarbonyl, or, when X^3 and X^4 are both OR^a, the two R^a groups together may form



,


,


where R^c is hydrogen or alkyl,



where R^d and R^e are independently hydrogen, alkyl, or together with the carbon atom to which they are attached may form a 1,1-cycloalkyl group;

X^5 is H, halogen, (C_1-C_{10})alkyl, fluorinated (C_1-C_{10}) alkyl (e.g. trifluoromethyl), (C_1-C_{10}) alkoxyalkyl, (C_1-C_{10})alkoxy, (C_1-C_{10})alkylether, (C_1-C_{10})thioalkoxy, (C_1-C_{10})alkylthio, amino, (C_1-C_{10})alkylamino, $-COX^6R^{25}$ where X^6 is O or NH and R^{25} is (C_1-C_4)alkyl optionally terminally substituted by an aryl or a heteroaryl group ~~[for example phenyl or a 5- or 6-membered heteroaryl group]~~ and additionally or alternatively terminally substituted by hydroxy, (C_2-C_{10})alkenyl, (C_2-C_{10})alkynyl, or is (C_2-C_{10})alkenyl or (C_2-C_{10})alkynyl in either case terminally substituted by an aryl or heteroaryl group ~~[for example phenyl or a 5- or 6-membered heteroaryl group]~~ and, when having a terminal methylic carbon atom, optionally further terminally substituted by

hydroxy[[.]], or a pharmaceutically acceptable salt or prodrug thereof, or a pharmaceutically acceptable salt of such a prodrug.

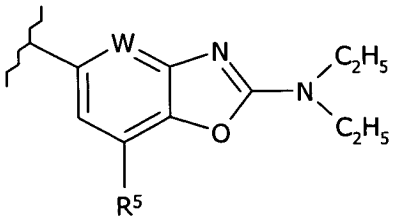
21. (Currently amended) A ~~compound~~ product of claim 20 wherein R^5 has from 1 to 4 plurally valent atoms.

22. (Currently amended) A ~~compound~~ product of claim 21 wherein the plurally valent atoms are selected from carbon, oxygen, sulfur and nitrogen.

23. (Currently amended) A ~~compound~~ product of claim 22 wherein R^5 is CH_3, CF_3, OH or NH_2.

24. (Currently amended) A ~~compound~~ product of claim 20 wherein R^5 is H, I, Br or Cl.

25. (Currently amended) A ~~compound~~ product of ~~any of~~ claim[[s]] 20 ~~to 24~~ wherein CYCLE is of formula (IX):

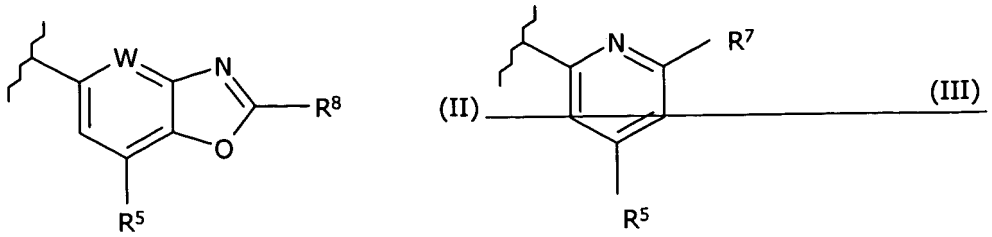


(IX)

26. (Currently amended) A ~~compound~~ product of ~~any of~~ claim[[s]] 20 ~~to 25~~ wherein ~~where~~ R^{20} and R^{21} are both hydrogen.

27. (Currently amended) An adenosine analogue-type A3 receptor agonist having an N6 nitrogen substituted by a group of the formula $-CR^{20}R^{21}$-CYCLE where

R^{20} and R^{21} are the same or different and H, F or CH_3; and CYCLE is of formula (II) ~~or formula (III)~~:



where:

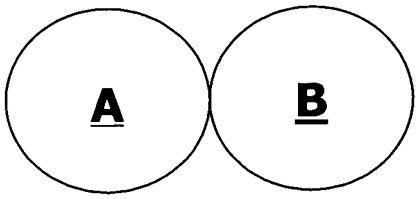
R^5 is iodine, bromine, methyl or trifluoromethyl;

~~R^7 is H, halogen, C_1-C_{10} acyl, OR^{11}, CO_2R^{11} or $CONR^{11}$ where R^{11} is C_1-C_{10} hydrocarbyl optionally containing one or more in-chain and/or in-ring -O- linkages~~;

R^8 is $-NR^9R^{10}$ or $-COR^9$, where R^9 and R^{10} are each independently methyl or ethyl; and

W is N or CH.

28. (Original) An adenosine analogue-type A3 receptor agonist having an N6 nitrogen substituted by a group of the formula $-CR^{20}R^{21}$-CYCLE where R^{20} and R^{21} are the same or different and H, F or CH_3; and CYCLE is a bicyclic (fused) heteroaromatic ring of the formula



wherein

ring A is a 5- or 6- membered ring characterised by the following features (in which ring positions are numbered relative to the linkage to $-CR^{20}R^{21}$-):

i. a carbon atom at the 1-position;

ii. carbon atom as CH or a nitrogen atom at position 2;

iii. it is 3, 4 fused to ring B;

iv. the 5-position ring atom is substituted by a moiety R^5 which is H, halogen or an organic moiety having from 1 to 6 plurally valent atoms in addition to monovalent atoms selected from hydrogen and halogen;

v. if a 6-membered ring, it has at the 6-position a nitrogen, or –CM- where M is H, CH_3 or F;

ring B is a 5 or 6 membered ring characterised by the following features:

(a) an in-ring heteroatom including O, N or S joined to the 4-position of ring A;

(b) said in-ring heteroatom is joined within the ring secondly to a carbon which is substituted by a moiety R^8 which is $-N(C_2H_5)_2$;

(c) an in-ring atom joined to the 3-position of ring A which is N,O, S or C, said C being in the form of a CH or CO group;

(d) in the case of a 6-membered ring, the remaining ring member is nitrogen or carbon in the form of CH.

29. (Canceled)

30. (Currently amended) A ~~product of any one of claims 1 to 26 or an agonist of claim 27 or claim 28 for use in a~~ method for selectively activating A_3 adenosine receptors in a mammal[[.]], comprising administering to the mammal an effective amount of a product of claim 1 or an agonist of claim 27.

31-32. (Canceled)

33. (Currently amended) ~~The use of a product of any one of claims 1 to 26 or an agonist of claim 27 or claim 28 for the manufacture of a medicament for use~~ A method for preconditioning the heart of a subject to protect it from ischaemic damage[[.]].

comprising administering to the subject an effective amount of a product of claim 1 or an agonist of claim 27.

34-35. (Canceled)

36. (Currently amended) A pharmaceutical composition comprising a product of ~~any one of~~ claim[[s]] 1 ~~to 26~~ or an agonist of claim 27 ~~or claim 28~~.

37. (Original) A pharmaceutical composition of claim 36 which is an intravenous formulation.

38. (Canceled)

39. (Currently amended) A method of stimulating adenosine A_3 receptors, comprising administering to a mammal in need of such treatment a therapeutically effective amount of a product of ~~any one of~~ claim[[s]] 1 ~~to 26~~ or an agonist of claim 27 ~~or claim 28~~.

40. (Currently amended) A method of reducing tissue or organ damage ~~(e.g., substantially preventing tissue or organ damage, inducing tissue or organ protection)~~ resulting from ischaemia or hypoxia, comprising administering to a mammal in need of such treatment a therapeutically effective amount of ~~an agent selected from~~ a product of ~~any one of~~ claim[[s]] 1 ~~to 26 and~~ or an agonist of claim 27 ~~or claim 28~~.

41. (New) The method of claim 39 wherein another cardiovascular drug is additionally administered to the mammal.